

STATEMENT OF BASIS (AI No. 12806)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0053571 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: ADM Grain Company
St. Elmo Facility
Post Office Box 52
Ama, Louisiana 70031

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Michelle Bickham

DATE PREPARED: October 13, 2008

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. NPDES permit – NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

C. LPDES permits – LA0053571
LPDES permit effective date: August 1, 2003
LPDES permit expiration date: July 31, 2008

D. Date Application Received: April 28, 2008

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - grain elevator and fertilizer transfer facility**

ADM Grain Company, St. Elmo Facility is an existing grain elevator that is involved in grain storage, loading, and unloading. As per a conversation with Lloyd Sutton on October 13, 2008, the facility occasionally transfers fertilizer from rail cars onto barges. Any spilled fertilizer is swept up; deck washing does not occur.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I
3. Wastewater Type: II
4. SIC code: 5153, 4491*

* In Appendix A - Section IV (Relation of 1987 to 1977 Industries) of the Standard Industrial Classification Manual, the SIC code 4491 is equivalent to a previous SIC code of 4463. As per

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C. LOCATION - 3338 Highway 44W, Paulina, St. James Parish
Latitude 30° 01' 26", Longitude 90° 42' 59"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: treated sanitary wastewater from the dock
Treatment: sewage treatment plant with extended aeration
Location: at the point of discharge from the sewage treatment plant
Flow: 750 gpd
Discharge Route: directly to the Mississippi River

Outfall 003

Discharge Type: stormwater runoff from pad and equipment washwater combined with
treated sanitary wastewater from Outfall 103
Treatment: settling pond
Location: at the point of discharge from the settling pond
Flow: intermittent
Discharge Route: local drainage thence to Blind River

Outfall 103

Discharge Type: treated sanitary wastewater from the office and plant area
Treatment: sewage treatment plant with extended aeration
Location: at the point of discharge from the sewage treatment plant
Flow: 1200 gpd
Discharge Route: through Outfall 003 thence to local drainage thence to Blind River

Outfall 004

This outfall was a previous stormwater outfall. This outfall is being removed from the permit based on a review of DMR's that indicated there were no excursions for the outfall for the last two years. Stormwater will now be addressed in the Stormwater Pollution Prevention Plan (SWP3) language in this permit.

4. RECEIVING WATERS

STREAM – directly to the Mississippi River

BASIN AND SEGMENT - Mississippi River Basin, Segment 070301

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- d. drinking water supply

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STREAM – local drainage thence to Blind River

BASIN AND SEGMENT – Lake Pontchartrain Basin, Segment 040403

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- g. outstanding natural resource waters*

*As per LAC33:IX.1111.A, outstanding natural resources waters shall only apply to discharges made to waterbodies specifically listed and not their tributaries or distributaries. These discharges do not directly discharge into Blind River.

5. TMDL STATUS

Subsegment 070301 is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. Subsegment 040403 is listed on LDEQ's Final 2006 303(d) List as impaired for nutrients, phosphorus, sedimentation/siltation, organic enrichment/low DO, mercury, and turbidity. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the grain elevator and fertilizer transfer facility point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Therefore, for the purposes of this permit, the nutrients, phosphorus, sedimentation/siltation, organic enrichment/low DO, and turbidity impairments will be addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Nutrients, phosphorus, organic enrichment/low DO

A BOD₅ limitation is being placed on the sanitary outfalls to prevent any further impairment of the nutrients, phosphorus, and organic enrichment/low DO impairment causes. LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.C.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a BOD₅ limitation. Compliance with the BOD₅ limitation as the indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the permit in addition to LDEQs ambient water quality

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monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. In addition, a TOC limitation is being placed on Outfall 003 to prevent any further impairment of the organic enrichment/low DO impairment cause.

Sedimentation/siltation, turbidity

TSS limitations are being placed in this permit to prevent any further impairment of the sedimentation/siltation and turbidity impairment causes.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

Changes from previous permit:

The description for Outfall 003 is being changed from "stormwater runoff, pad washwater, equipment washwater and previously monitored sanitary wastewater" to "stormwater runoff from pad and equipment washwater combined with treated sanitary wastewater from Outfall 103". The washwater from the pad area is being taken out of the description as indicated in an email from Jim McCune dated September 24, 2008.

Outfall 004 is being removed from the permit. Stormwater will now be addressed in the Stormwater Pollution Prevention Plan (SWP3) language in this permit.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC – There have been no recent inspections at the facility.

B. DMR Review/Excursions –

A review of DMR's for the last two years showed no excursions. All DMR's were submitted in accordance with the existing permit.

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8. EXISTING EFFLUENT LIMITS

Outfalls 001 and 103 – treated sanitary wastewater

Parameter	LPDES	
	Monthly Average	Weekly Average
Flow	Report 1/6 months Est.	Report 1/6 months Est.
BOD ₅	---	45 mg/L 1/6 months Grab
TSS	---	45 mg/L 1/6 months Grab
Fecal Coliform	---	400 col./100mL 1/6 months Grab
pH*	6.0-9.0 s.u. 1/6 months Grab	

*pH only required for Outfall 001

Outfall 003 – stormwater runoff, pad washwater, equipment washwater and previously monitored sanitary wastewater

Parameter	LPDES	
	Monthly Average	Daily Max
Flow	Report 1/month Est.	Report 1/month Est.
TOC	---	50 mg/L 1/month Grab
TSS	---	45 mg/L 1/month Grab
Oil & Grease	---	15 mg/L 1/month Grab
pH	6.0-9.0 s.u. 1/month Grab	

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Outfall 004 – stormwater runoff

Parameter	LPDES	
	Monthly Average	Daily Max
Flow	Report 1/quarter Est.	Report 1/quarter Est.
Oil & Grease	---	15 mg/L 1/quarter Grab
TOC	---	50 mg/L 1/quarter Grab
pH	6.0-9.0 s.u. 1/quarter Grab	

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated October 24, 2007, from Boggs (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

The receiving waterbody, Subsegment 040403 of the Lake Pontchartrain River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007, from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

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10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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Rationale for ADM Grain Company

1. **Outfalls 001 and 103** - treated sanitary wastewater (estimated flow is Outfall 001 – 750 gpd and Outfall 103 – 1200 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Weekly Avg (mg/l)	<u>Reference</u>
Flow (gpd)	Report: Report	BPJ; Light Commercial General Permit
BOD ₅	---: 45	BPJ; Light Commercial General Permit
TSS	---: 45	BPJ; Light Commercial General Permit
Fecal Coliform		
Colonies/100ml	---: 400 (Daily Max)	BPJ; Light Commercial General Permit
pH*	6.0 : 9.0	BPJ; Light Commercial General Permit
standard units	(min): (max)	

Treatment: sewage treatment plant with extended aeration

Monitoring Frequency: semiannually for all parameters at the point of discharge from the sewage treatment plants

Limits Justification: BPJ; per the Light Commercial General Permit, Schedule A, Treated Sanitary Wastewater less than 5000 GPD, previous permit, and similar facilities.

*Outfall 103 is not required to sample for pH as it is an internal outfall.

2. **Outfall 003** - stormwater runoff from pad and equipment washwater combined with treated sanitary wastewater from Outfall 103 (estimated flow is intermittent)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/l)	<u>Reference</u>
Flow (gpd)	Report: Report	BPJ; previous permit; similar facilities
TOC	---: 50	BPJ; previous permit; similar facilities
TSS	---: 45	BPJ; previous permit; similar facilities
Oil & Grease	---: 15	BPJ; previous permit; similar facilities
pH	6.0 : 9.0	BPJ; previous permit; similar facilities
standard units	(min): (max)	

Treatment: settling pond

Monitoring Frequency: Monthly at the point of discharge from the settling pond

Limits Justification: BPJ; previous permit; similar facilities

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BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

An SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.h, facilities classified as SIC code 4491 are not considered to have storm water discharges associated with industrial activity unless they have "vehicle maintenance shops, equipment cleaning operations, or airport deicing operations." This facility has equipment cleaning operations.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).